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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/639,677	08/13/2003	Fernando Cuervo	3444-Z	6127
7590 Law Office of Jim Zegeer Suite 108 801 North Pitt Street Alexandria, VA 22314			EXAMINER SURVILLO, OLEG	
			ART UNIT 2142	PAPER NUMBER
			MAIL DATE 05/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/639,677

Applicant(s)

CUERVO ET AL.

Examiner

Oleg Survillo

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/13/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 3-7, and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Law (2004/0039803).

As to claim 1, Law shows an apparatus for establishing services that utilize policy-enabled resources in a communications network, comprising a first policy enforcement point (PEP) (212 Fig. 2) for identifying policy-enabled resources that are available and allocating requested policy-enabled resources to services comprising locally consolidating and analyzing the network conditions to perform network actions (paragraph [0037] lines 11-14). Law shows a first network resource controller (NRC) for requesting from available policy-enabled resources any policy-enabled resources required to establish a particular service comprising a Policy Enforcement Agent (PEA) (208 Fig. 2) that performs a network resource management (paragraphs [0055] and [0057]). Law also shows a first resource policy layer (RPL) for provisioning, to a service being established, the policy-enabled resources allocated to that service comprising a Policy Server (204) that includes a Policy Decision Point (PDP) (210 Fig. 2) that

Art Unit: 2142

validates and pushes the requested policy rule to a PEP (212) (paragraph [0036] lines 7-11).

As to claims 3 and 10, Law shows that the communications network comprises a plurality of domains comprising administrative sub-domains (301a, 301b, and 301c Fig. 3) each of the first PEP, first NRC, and the first RPL may be associated with any one of the domains (Fig. 3).

As to claim 4, Law shows the communication network comprising a plurality of domains comprising administrative sub-domains (301a, 301b, and 301c Fig. 3) wherein the apparatus further comprises a second PEP associated with a different domain than the first PEP comprising network node (311b) and (311c) each comprising PEP and associated with different domains (Fig. 3).

As to claim 5, Law shows the communication network comprising a plurality of domains comprising administrative sub-domains (301a, 301b, and 301c Fig. 3) wherein the apparatus further comprises a second NRC associated with a different domain than the first PEP comprising PEA (308b) associated with different domain (301b) than the first PEP belonging to domain (301a) (Fig. 3).

As to claim 6, Law shows the communication network comprising a plurality of domains comprising administrative sub-domains (301a, 301b, and 301c Fig. 3) wherein the apparatus further comprises a second RPL associated with a different domain than the first PEP comprising PS (304b) associated with different domain (301b) than the first PEP belonging to domain (301a) and associated with PS (304a) (Fig. 3).

Art Unit: 2142

As to claim 7, Law shows that each RPL comprises one or more PDPs comprising a Policy Server (204) having at least one PDP (210) Fig. 2.

As to claim 9, Law shows a method of establishing services that utilize policy-enabled resources in a communications network, comprising identifying, at a first policy enforcement point (PEP) (212 Fig. 2) policy-enabled resources that are available and allocating requested policy-enabled resources to services comprising locally consolidating and analyzing the network conditions to perform network actions (paragraph [0037] lines 11-14). Law shows requesting, from available policy-enabled resources at a first network resource controller (NRC) any policy-enabled resources required to establish a particular service comprising a Policy Enforcement Agent (PEA) (208 Fig. 2) that performs a network resource management (paragraphs [0055] and [0057]). Law also shows provisioning, to a first resource policy layer (RPL), the policy-enabled resources allocated to that service comprising a Policy Server (204) that includes a Policy Decision Point (PDP) (210 Fig. 2) that validates and pushes the requested policy rule to a PEP (212) (paragraph [0036] lines 7-11).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2142

3. Claims 2 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Law (2004/0039803) in view of Gibson et al. (2002/0085559).

As to claim 2, Law shows all the elements except for the first PEP comprising a plurality of virtual PEPs.

Gibson shows that the first PEP comprising a Virtual Switch Control Function (VSCF) comprises a plurality of virtual PEPs wherein each virtual PEP being associated to a respective service comprising VSCF being able to support multiple reference points for policy control to be controlled by multiple PDPs for different aspects of policy (paragraph [0042]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Law by having a plurality of virtual PEPs in order to allow PEP to be controlled by multiple PDPs for different aspects of policy (paragraph [0042] in Gibson).

As to claims 11 and 12, Law shows that PEP is provisioned to provide resource services comprising having a Policy Decision Point (PDP) (210 Fig. 2) that validates and pushes the requested policy rule to a PEP (212) (paragraph [0036] lines 7-11).

Law does not show having virtual PEPs of a main PEP.

Gibson shows that the main PEP comprising a Virtual Switch Control Function (VSCF) comprises virtual PEPs wherein each virtual PEP being associated to a respective service comprising VSCF being able to support multiple reference points for policy control to be controlled by multiple PDPs for different aspects of policy (paragraph [0042]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Law by having virtual PEPs in order to allow PEP to be controlled by multiple PDPs for different aspects of policy (paragraph [0042] in Gibson).

As to claim 13, Law shows having separate PEPs, each from a different domain, being provisioned to the same service by a PDP comprising having PDPs 310a and 310b each validating the request and pushing the policy rule to PEAs for policy enforcement by PEPs (paragraph [0050] Fig. 3).

As to claim 14, Law shows two separate PEPs, each from a different domain, are provisioned to the same service by a PDP comprising having PDPs (310a) and (310b) each validating the request and pushing the policy rule to PEAs for policy enforcement by PEPs (paragraph [0050] Fig. 3).

As to claim 15, Law shows that the PDP is in one of the two domains comprising PDP (310a) servicing first domain (301a) (Fig. 3).

As to claim 16, Law shows that the PDP is in a third domain comprising PDP (310a) servicing third domain (301c) (Fig. 3).

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Law (2004/0039803) in view of RFC 3084 COPS Usage for Policy Provisioning (COPS-PR) by Network Working Group, Chan et al.

As to claim 8, Law shows all the elements except for resource capability information descriptors being used for resource discovery and policy provisioning between entities.

Chan shows resource capability information descriptors comprising REQ and DEC messages that are used for resource discovery and policy provisioning between entities (page 3, COPS provisioning model, 3.1-3.2 REQ and DEC pages 7-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Law by having resource capability information descriptors used for resource discovery and policy provisioning between entities in order to utilize COPS protocol for policy outsourcing and policy provisioning in communication between entities (paragraph [0004], lines 18-21 in Law).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oleg Survillo whose telephone number is 571-272-9691. The examiner can normally be reached on M-Th 7:30am - 5:00pm; F 7:30am - 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.




Art Unit: 2142

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Oleg Survillo

Date: April 27, 2007

Phone: 571-272-9691

  
ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER